

## PROJECT DESCRIPTION

## I. GENERAL

This project involves the modification of an existing Traffic Control Signal with street lighting at the intersection of MD 212 (Riggs Road) and MD 211 (Sargent Road) in Prince George's County. Pedestrian phases across MD 212 and MD 211 shall be installed and an additional five section signal head for westbound left turns shall be added. MD 212 (Riggs Road) is assumed to run an east-west direction.

## II. INTERSECTION OPERATION

- The intersection shall continue to operate in a NEMA four-phase, fully-actuated mode, with the MD 212 (Riggs Road) approaches running concurrently. The Exclusive/Permissive left turn phase for the westbound approach of MD 212 (Riggs Road) shall remain in operation. A pedestrian phase with pushbutton actuation shall be provided across the west leg of MD 212 (Riggs Road). A new pedestrian phase across MD 211 (Sargent Road) shall be on recall. The MD 211 (Sargent Road) approach shall continue to run alone.
- The existing eight-phase controller with all necessary equipment housed in a NEMA size "5" pole-mounted cabinet shall be utilized at this intersection.

## III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables to the appropriate terminals and shall properly label each cable.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

## EQUIPMENT LIST

## A. EQUIPMENT TO BE SUPPLIED BY S.H.A.

ITEM NO.	DESCRIPTION	QUANTITY
9570	Sheet aluminum signs to consist of: (ground mount)	31.5 SF
	M6-2 "arrow (symbolic)" left diagonal sign, (15" x 21") ground mounted.	1 EA
	W11-2 "PEDESTRIAN CROSSING (SYMBOLIC)" sign, (30" x 30") ground mounted with hardware	2 EA
	W13-4(1) "ACROSS RAMP" sign, (24" x 36") ground mounted with hardware	1 EA
	GUIDE SIGN (30"x51")	1 EA
	M3-3 "SOUTH"(24"x12")	
	M1-5 "MD 211"(30"x24")	
	M6-1 "left arrow"(21"x15")	
9571	Sheet aluminum signs to consist of: (mast arm or pole mount)	44.5 SF
	M6-2 "arrow (symbolic)" right diagonal sign, (15" x 21") ground mounted.	1 EA
	W11-2 "PEDESTRIAN CROSSING (SYMBOLIC)" sign, (30" x 30") ground mounted with hardware	1 EA
	GUIDE SHIELD ASSEMBLY (48"x75") pole mounted.	1 EA
	M3-4 "WEST"(30"x15")	
	M1-5 "MD 212"(48"x36")	
	M6-1 "left arrow"(30"x24")	
	GUIDE SHIELD ASSEMBLY (30"x51") pole mounted.	1 EA
	M3-2 "EAST"(24"x12")	
	M1-5 "MD 212"(30"x24")	
	M6-1 "right arrow"(21"x15")	

## EQUIPMENT LIST

## B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment.	1 EA
2001	Class 2 Excavation.	1 C.Y.
2002	Test Pit Excavation	2 C.Y.
5004	Furnish and install 12" white heat applied permanent preformed thermoplastic pavement marking.	270 L.F.
5005	Furnish and install 24" white heat applied permanent preformed thermoplastic pavement marking.	45 L.F.
5008	Remove existing pavement markings - any width.	90 L.F.
6001	Furnish and install depressed curb and gutter.	20 L.F.
6004	Furnish and install 4" concrete sidewalk.	70 S.F.
8010	Furnish and install 12" pedestrian signal head section (Black Faced)	8 EA
8011	Furnish and install 12" vehicular traffic signal head section (Black Faced)	22 EA
8019	Furnish and install 8" vehicular traffic signal head section. (Black Faced)	3 EA
8030	Furnish and install breakaway pedestal pole (10').	2 EA
8032	Furnish and install ped pushbutton and sign - R10-4(1) sign - 9" x 12" - "PUSH BUTTON TO CROSS RIGGS ROAD"	2 EA
8042	Install conduit bend 3" in existing foundation.	1 EA
8048	Remove and dispose of material and equipment per assignment	1 EA
8051	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - trenched	35 L.F.
8059	Furnish and install concrete for signal foundation	2 C.Y.
8060	Furnish and install wood sign supports 4" x 4"	75 L.F.
8062	Furnish and install No. 6 AWG stranded bare copper ground wire.	110 L.F.
8066	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - bored.	45 L.F.
8074	Furnish and install electrical handhole.	2 EA
8076	Install ground mounted sign.	31.5 S.F.
8077	Install overhead sign.	36 S.F.
8082	Furnish and install ground rod - 3/4" x 10'.	2 EA
8084	Furnish and install electrical cable - 2 conductor (No. 14 AWG).	330 L.F.
8085	Furnish and install electrical cable - 3 conductor (No. 14 AWG).	365 L.F.
8086	Furnish and install electrical cable - 5 conductor (No. 14 AWG).	290 L.F.
8087	Furnish and install electrical cable - 7 conductor (No. 14 AWG).	215 L.F.
8091	Furnish and install steel span wire, 1/4" diameter.	155 L.F.
Neg.	Remove and replace brick sidewalk.	30 S.F.

## EQUIPMENT LIST

## C. EQUIPMENT TO BE REMOVED

All removed signal materials are to become property of the contractor.

The contact persons for District #3 (Prince George's County) are as follows:

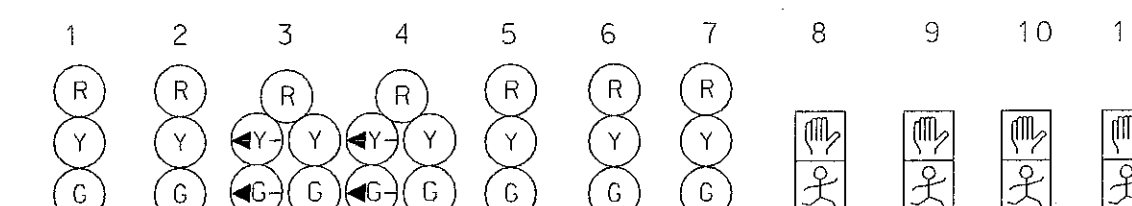
Mr. Majid Shakib  
Assistant District Engineer - Traffic  
Phone: (301) 513-7358

Mr. Raleigh Medley  
Assistant District Engineer - Maintenance  
Phone: (301) 513-7304

Mr. Augie Rebish  
Assistant District Engineer - Utility  
Phone: (301) 513-7350

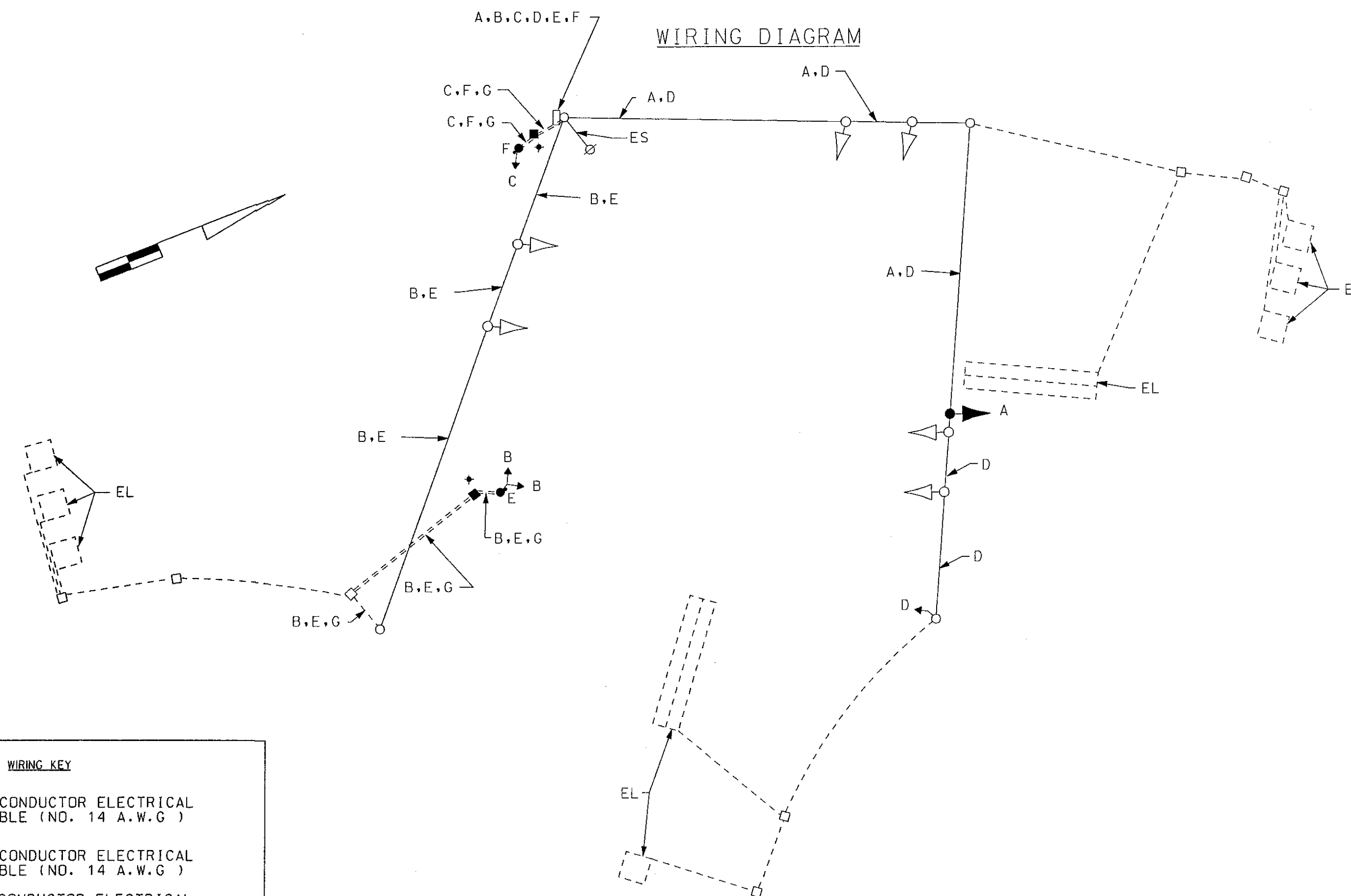
Mr. Richard L. Daff, Sr.  
Chief, Traffic Operations Division  
Phone: (410) 787-7630

## PHASE CHART



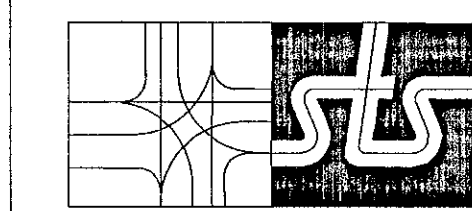
PHASE	1	2	3	4	5	6	7	8	9	10	11
PHASE 2 & 5	R	R	G	G	G	R	R	DW	DW	DW	DW
2 & 5 CHANGE	R	R	G	G	G	R	R	DW	DW	DW	DW
PHASE 2 & 6	G	G	G	G	G	R	R	WK	WK	DW	DW
PED CLEAR	G	G	G	G	G	R	R	FL/DW	FL/DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	R	R	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	G	G	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	Y	Y	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	G	G	DW	DW	WK	WK
PED CLEARANCE	R	R	R	R	R	G	G	DW	DW	FL/DW	FL/DW
4 ALT CHANGE	R	R	R	R	R	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	DARK	DARK

## WIRING DIAGRAM



## WIRING KEY

- A - 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- B - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- C } 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- D } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- E }
- G - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- EL - LOOP WIRE (NO. 14 A.W.G.) EXISTING
- ES - EXISTING OVERHEAD SERVICE TO BE MAINTAINED BY PEPCO
- + - GROUND ROD



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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 212 (RIGGS ROAD) AND  
MD 211 (SARGENT ROAD)

DRAWN BY: ROB CICCHINI  
CHECKED BY: R. ZACHERL  
SCALE: none  
DATE: 8/23/02

F.A.P. NO. 1779-A  
S.H.A. NO. PR-24460  
COUNTY: PRINCE GEORGES  
LOG MILE: 16021101.12

TS NO. 1779-A  
T.I.M.S. NO. F249

SHEET NO. 2 OF 2